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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,639	09/25/2001	Mark Kevin O'Connor	GRANT-015	2501
30139	7590	09/10/2007	EXAMINER	
WILSON & HAM			HAN, QI	
2530 BERRYESSA ROAD				
PMB: 348			ART UNIT	
SAN JOSE, CA 95132			2626	
			MAIL DATE	
			09/10/2007	
			DELIVERY MODE	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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<b>Office Action Summary</b>	Application No. 09/937,639	Applicant(s) O'CONNOR, MARK KEVIN	
	Examiner Qi Han	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 105-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 105-116 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Response to Amendment***

2. This communication is responsive to the applicant's amendment dated 07/03/2007. The applicant(s) amended claims 105-116 (see the amendment: pages 2-8).

The examiner withdraws the previous claim rejection under 35 USC 101, because the applicant amended the corresponding claims.

The examiner withdraws the previous claim rejection under 35 USC 112 1<sup>st</sup> and 2<sup>nd</sup>, because the applicant amended the corresponding claims.

It is noted that the applicant failed to respond the objection regarding drawings. Therefore, the drawing objection will be sustained (see below).

#### ***Response to Arguments***

3. Applicant's arguments filed on 03/07/2006 with respect to the claim rejection under 35 USC 102/103, have been fully considered but are moot in view of the new ground(s) of rejection. It is noted that even though the amended claims may introduce new issue and/or change the scope of the claims, the previous cited references are still applicable to the newly amended claims for the prior art rejection (see below).

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In response to applicant's arguments with respect to claim 105 that "Collins (prior art reference) does not disclose a converter that converts standard text into "a plurality of non-standard processed texts" that "differ on from another by the amount of said phonetic clues in each processed text" (Remarks: page 11, paragraphs 3-4), the examiner has a different view of the prior art teachings and the claim interpretations. It is noted that when the Chinese characters is interpreted as the claimed "standard text", the Pinyin texts without tones and Pinyin texts with tones (Collins: col. 8, lines 19-30) can be properly read on the argued/claimed limitations, so that, Collins teaches all limitations of claim 105 (see detail in the new rejection below).

It is also noted that when the Pinyin (without tone) is interpreted as the claimed "standard text" or "alphabetic text", the combined teachings of Collins and George can satisfy the limitations of the other claims (including independent claims 106-107, 110-111 and 116). The response to the applicant's arguments regarding these claims is directed to the corresponding new ground rejection (see detail below).

### *Drawings*

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation "re-convert the at least one processed text into the standard text by employing the electronic markers..." in claim 108 and the similar limitation in claim 113 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

5. Claim 107, 109 and 116 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 107, the claimed limitation "convert said resolved text into a phonetically enriched text by including ... and by adding ... as additional phonetic markers indicative of ... in **standard text that are not identified as said homonyms**" (amended on 11/22/2006) introduces new subject matter, because it is not specifically described in the original specification.

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Regarding claim 109, the newly amended limitation “variations in the visual appearance of **the** letters (referred to the standard text) **within** word shapes **in the processed texts** as displayed” introduces new subject matter, because it is not specifically described in the original specification.

Regarding claim 116, the claimed limitation “the standard text phonetic markers” (amended on 11/22/2006) introduces new subject matter, because it is not specifically described in the original specification.

6. Claims 107, 110 and 112-116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 107, the claimed limitation “convert said resolved text into a phonetically enriched text by including ...and by adding ...as additional phonetic markers indicative of ... in standard text **that are not identified as said homonyms**” is indefinite, because it is unclear or confused what the limitation really means. If the word “that” refers to standard text, it appears to conflict with the third component of the claim, which recites that “the context in the standard text of each of said homonyms identified by said filter.” Further, if the word “that” refers the phonetic markers or the pronunciation, it does not make sense to the examiner and lacks specific description in the specification.

Regarding claim 110, it recites the limitation “**the** standard text” in the first component of the claim. There is insufficient antecedent basis for this limitation in the claim.

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Regarding claims 112-115, the rejection is based on the same reason described for claim 110 because the dependent claims include the same or similar problematic limitations as claim 110.

Regarding claim 116, it recites the limitation “the standard text phonetic markers” in the first component of the claim. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

7. Claims 105-3, 5, 19-21 and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by COLLINS et al. (US 5,594,642) hereinafter referenced as COLLINS.

As per **claim 105**, COLLINS discloses ‘a method and system for assisting input information’ (abstract) with computer-based environment having display device (Fig. 1 and col. 3, lines 18-38), wherein the mechanism of handling process of text input, text editing and converting (col. 4, lines 42-45) is corresponding to claimed “the text processor”, comprising:

“a pronouncing-dictionary data-base in which word-shapes of the standard text are matched with information indicative of the pronunciation of said word-shapes”, (Figs. 7b-7c and col. 6, lines 21-23, ‘the main dictionary plus one or more user dictionaries (corresponding to a pronouncing-dictionary data-base)’; col. 8, lines 9-30, ‘interchangeable dictionaries (dictionary data-base)’, ‘Chinese dictionary with or without tones’ that provides Pinyin (phonetic text), wherein the Chinese characters is read on “the standard text” and Pinyin is read on “information indicative of the pronunciation of said word-shapes; further in another view, the Pinyin (phonetic text of Chinese-- only using normal English letters) can also be read on “the standard text” and



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the corresponding tones (or Pinyin with tones) is read on the claimed “information indicative...” see rejection for the other claims below).

“a converter adapted to convert the standard text into a plurality of non-standard processed texts by adding information from the data-base to the standard text, in the form of phonetic clues to the pronunciation of word-shapes in the standard text, so that the non-standard processed texts differ one from another by the amount of said phonetic clues in each processed text”, (col. 8, 29-30, ‘entries in a Chinese dictionary (data-base) with or without tones’, wherein the Chinese text (Chinese character) is converted to the Pinyin term ‘beijing’ ‘without tones’ and/or converted to ‘bei3jinag1’ and/or ‘bei4jing3’ ‘with tones’ (read on claimed “a plurality of non-standard processed texts”), and wherein the Pinyin term itself and/or the different tone markers represented by digits are read on “phonetic clues to the pronunciation of word-shapes in the standard text”, and wherein the forms of Pinyin (phonetic clues) with or without tones can properly read on the claimed “differ one from another by the amount of said phonetic clues in each processed text”).

“display means for displaying at least one said processed texts”, (Fig. 1 and col. 3, lines 35-38, ‘a display adapter 36 connecting the bus to a display device 38’; col. 4, lines 45-63, ‘text is displayed in the active area’; ‘there are a number of different kinds of text on the screen (display): confirmed text...converted text... raw text (necessarily and/or inherently including displaying phonetic text, such as pinyin)’).

*Claim Rejections - 35 USC § 103*

8. Claim 106-78, 83, 85, 90, 92-93 and 98 is rejected under 35 U.S.C. 103(a) as being unpatentable over COLLINS in view of GEORGE (US 5,832,478).

As per **claim 109** (depending on claim 105), as best understood in view of the rejection under 35 USC 112 1<sup>st</sup>(see above), it is noted that when the ‘Pinyin’ (phonetic text of Chinese) is interpreted as the claimed “standard text”, COLLINS’ disclosure is further read on the claimed “the standard text employs alphabetic letters and a letter order that accords with a convocal spelling system of the natural language, the processed texts have the alphabetic letters and spelling of the standard text, and the display means is adapted to make visible said phonetic clues in the processed texts as variations in the visual appearance of the letters of (or within) word-shapes in the processed texts as displayed” (Fig. 7c and col. 8, lines 18-30; col. 4, lines 45-63; wherein the display device necessarily and/or inherently includes displaying phonetic text, such as pinyin that uses alphabetic letters and has a letter order of spelling), but COLLINS does fully satisfy the second component of the parent claim 105, i.e. “a plurality of non-standard processed texts” that “differ one from another by the amount of said phonetic clues in each processed text”. However, the feature is well known in the art as evidenced by GEORGE who discloses ‘method of searching an on-line dictionary using syllables and syllable count’ (title), comprising on-line dictionary, each entry of the dictionary includes multiple phonetic texts (processed texts), including unregimented Pinyin (without tones), segmented Pinyin ‘broken down the syllables’ by ‘space’, ‘additional unsegmented language representation...i.e. Pinyin and tone’, and segmented Pinyin with tone attached the end of syllable, which differ one from another by the amount of said phonetic clues as claimed. Therefore, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to recognize that the normal electronic dictionary (database) can be implemented in the same way as the on-line dictionary, and to modify COLLINS by providing multiple phonetic texts for the converted presentation and/or dictionary entry, as taught by GEORGE, for the purpose (motivation) of improving the effectiveness of text searches (GEORGE: col. 3, lines 46-47).

As per **claim 106**, the rejection is based on the same reason used for claims 105 and 109 because the rejection for claims 105 and 109 also reads on the limitations of 106, wherein each text in lines 2-4 of the fields in Fig. 3 disclosed by GEORGE can be read on the claimed “enriched text” comparing a text (read on processed text) in its upper line(s).

As per **claim 107**, as best understood in view of the rejection under 35 USC 112 1<sup>st</sup> and 2<sup>nd</sup> (see above), the rejection is based on the same reason used for apparatus claims 105 and 109, because the rejection for claims 105 and 109 also reads on the limitations of 107, wherein the mechanism of parsing homophone related texts such as Pinyin term “beijing”, “bei3jing1” and “bei4jing3” disclosed by COLLINS (col. 5, lines 35-40 and col. 8, lines 19-30) corresponds to the claimed homonym filtering and non-homophonous homonym identifying features (second and third components of the claim); and wherein at least the different presentation texts with “space” or “tone”, such as the texts of lines 2-4 of the fields in Fig. 3 disclosed by GEORGE can be read on the claimed “processed text”, “resolved text”, “enriched text” with “phonetic markers” respectively.

As per **claim 110**, it recites a method. As best understood in view of the rejection under 35 USC 112 1<sup>st</sup> (see above), the rejection is based on the same reason described for claims 105 and 109, because the rejection for claims 105 and 109 also reads on the limitations of claim 110.

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As per **claim 111**, it recites a method. The rejection is based on the same reason use for claim 106, because the claim recited the same or similar limitations as claim 106.

As per **claim 114** (depending on claim 110), the rejection is based on the same reason used for claim 109, because it also reads on the limitation of claim 114, wherein the texts in Fig.3 disclosed by GEORGE can be properly read on the claim.

As per **claim 115** (depending on claim 110), the rejection is based on the same reason described for claim 109, because the claim recites the same or similar limitations as claim 109.

As per **claim 116**, it recites a method. As best understood in view of the rejection under 35 USC 112 1<sup>st</sup> and 2<sup>nd</sup> (see above), the rejection is based on the same reason used for claim 107, because the claim recites the same or similar limitations of claim 107.

### *Conclusion*

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (571) 272-7604. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (571) 272-7602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: [ebc@uspto.gov](mailto:ebc@uspto.gov). For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh

September 4, 2007

 9/4/07